

PATENT CLAIMS

1. A laser welding device for welding one or more said components (7), comprising one or more said laser welding heads (2), **characterized in that** said laser welding device (1) has one or more said moving means (8) for said components (7) for a relative movement in relation to said laser welding head (2), which is designed as a remote laser and is arranged at a spaced location from said component (7).

2. A laser welding device in accordance with claim 1, **characterized in that** said moving means (8) is designed as a said component conveyor (9).

3. A laser welding device in accordance with claim 1, **characterized in that** said moving means (8) are designed as a said multiaxial robot (10).

4. A laser welding device in accordance with claim 1, 2 or 3, **characterized in that** said laser welding head (2) are arranged stationarily.

5. A laser welding device in accordance with claim 1, 2 or 3, **characterized in that** said laser welding head (2) is arranged nonstationarily by means of a said moving unit (11).

6. A laser welding device in accordance with one of the above claims, **characterized in that** said laser welding head (2) has one or more scanner heads for the controllable deflection of said laser beam (4).

7. A laser welding device in accordance with one of the above claims, **characterized**

in that said moving means (8) for said components (7) is controlled according to the focal distance.

8. A laser welding device in accordance with one of the above claims, **characterized in that** said laser welding head (2) has a focal distance of approx. 200 mm to 400 mm.

5 9. A laser welding device in accordance with one of the above claims, **characterized in that** a plurality of said laser welding heads (2) are connected to a said common external laser beam source (3) by means of a said controllable beam switch (6) and said laser beam guides (5).

10 10. A process for the laser welding of one or more said components (7) by means of one or more said laser welding heads (2), **characterized in that** said components (7) are guided and moved during welding by one or more said moving means (8) by a preferably multiaxial relative movement in relation to said laser welding head (2), which is designed as a remote laser and is arranged at a spaced location from said component (7).

15 11. A process for laser welding in accordance with claim 10, **characterized in that** said components (7) are moved by one or more said multiaxial robots (10).